



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/800,623

03/16/2004

Chuang Chun Chiueh

CHIU3036/EM

9675

23364 7590 03/17/2008

BACON & THOMAS, PLLC
625 SLATERS LANE
FOURTH FLOOR
ALEXANDRIA, VA 22314

EXAMINER

WARE, DEBORAH K

ART UNIT

PAPER NUMBER

1651

MAIL DATE

DELIVERY MODE

03/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/800,623	CHIUEH, CHUANG CHUN	
	Examiner	Art Unit	
	DEBBIE K. WARE	1651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1, 3-5 and 11 are pending.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 10, 2007, has been entered.

Response to Amendment

The amendment filed December 10, 2007, has been received and entered and the previous prior art rejection has been removed.

Drawings

The drawings filed March 16, 2004, have been approved by the Examiner.

Foreign Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-5, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 3-5, and 11 are rendered vague and indefinite for the recitation of the term "desired" since this term is subjective and it is unclear what algae species can be cultured by the claimed method. Further, the step of "carrying out mass culture" is not clear with respect to how the process step is to be carried out per se.

Also the term "high-nitrogen organic substance and without inorganic salts" is unclear as to what substances are intended to be excluded. In addition the term "and without inorganic salts" is unclear as to whether the culture medium is to be without inorganic salts or only the high-nitrogen organic substance. In addition, the claimed process is unclear as to what kind of microorganisms are intended to be edible and whether they are to be edible by the algae or by a subject ingesting the cultured algae. The metes and bounds of the claims are uncertain and can not be determined.

Further, the claims are unclear as to what is intended to constitute the inorganic salts. Further, the term "characterized" does not clearly described the claimed method steps, and it is uncertain whether the term is describing characteristics of the method or the culture medium and also what types of inorganic additives are being referred to by the language "stays free of the contamination of inorganic additives". It is further uncertain whether "an organic environment" is referring to the culture medium or what? The term "mass culture" lacks antecedent basis". The term "contamination" also lacks antecedent basis.

Art Unit: 1651

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5 and 11 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over newly cited Haerther et al (US Pat. 6896804), cited on enclosed PTO-892 Form.

Claims are drawn to a method of culturing blue-green algae in an organic medium and a cultured blue-green algae. The method comprises obtaining the algae species, inoculating the species in a culture medium and carrying out the culture. The method is carried out in an organic environment and stays free of contamination of inorganic additives and the medium contains high-nitrogen organic substance (i.e. high protein organic matter). The culture is fermented and aerated to give a pH of 8 or greater. Additional organisms can be added which can be edible.

Haerther et al teach a method of culturing blue-green algae in an organic medium and a cultured blue-green algae (col. 16, line 2). The method comprises obtaining the algae species, inoculating the species in a culture medium and carrying out the culture on an organic medium (col. 16, lines 28-30). The method is carried out in an organic environment and stays free of contamination of inorganic additives (col. 16, lines 28-30 and col. 16, lines 34-35) and the medium contains high-nitrogen organic substance (i.e. high protein organic matter), col. 16, lines 45-48. The culture is fermented and aerated to give a pH of 8 or greater, bridging col. 18-19, lines 55-67, and 1, respectively, . Additional organisms can be added which can be edible as well, col. 23, lines 25-30.

The claims are identical to the cited disclosure and are, therefore, considered to be anticipated by the teachings of the reference. However, in the alternative that there is some unidentified claim characteristic which is not disclosed then the difference is considered to be slight as to render the claims obvious to one of ordinary skill in the art at the time the claimed invention was made. It would have been obvious to culture cyanophyta in an organic environment containing high organic nitrogen substance because the reference teaches the desire in the art to avoid contamination and that in some culturing fermentations such culture medium is known to provide successful results. Thus, one of skill would have been motivated to grow blue-green algae in a culture medium containing high nitrogen in organic form because it is well known to provide successful results. Each of the claim features are either disclosed or suggested or intrinsically expressed by the teachings of Haerther et al and in the absence of

Art Unit: 1651

persuasive evidence to the contrary the claims are deemed prima facie obvious over the cited prior art.

Conclusion

All claims fail to be patentably distinguishable over the state of the art discussed above and cited on the enclosed PTO-892. Therefore, the claims are properly rejected.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah K. Ware whose telephone number is 571-272-0924. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Deborah K. Ware/

Examiner, Art Unit 1651

March 1, 2008